

REMARKS

Initially, Applicant would like to thank the Examiner for her indication of the allowability of the subject matter recited in claims 13 and 14, if rewritten into independent form to include all of the features of base and independent claims. Additionally, Applicant thanks the Examiner for her acknowledgment of the claim for foreign priority under 35 U.S.C. §119, as well as her indication that the certified copies of all priority documents have been received. Furthermore, Applicant thanks the Examiner for acknowledging the consideration of the references cited and submitted by the Applicant in an Information Disclosure Statement filed April 3, 2002.

In the above-noted Official Action, claims 13 and 14 were objected-to as being dependent upon a rejected base claim, but were otherwise indicated as allowable if rewritten into independent form to include all of the limitations of the base claim and any intervening claims. Claims 1-12 and 15-17 (and presumably claim 18, though this was not specified in the remarks) were rejected under 35 U.S.C. §102(b) over KAWAMURA (U.S. Patent No. 5,500,578).

Upon entry of the present amendment, Applicant will have amended the specification and Figures 4B and 11B. In particular, Applicant is adding S68 to Figure 4B to specify that Initial Driving Frequency is set as the Current Starting Frequency Data after the ultrasonic motor starts (S59 = Yes) and before the rotational speed of the ultrasonic motor is determined (S69). Additionally, Applicant has revised the label of

S67 to clarify that the Current Starting Frequency Data is set "as" the Maximum Frequency in the Controllable Frequency Range. The amendments to the specification at pages 22, 23 and 28 correspond to the amendments to the Figures. Similar amendments have been made to Figure 11B for the similar process shown therein.

In this regard, Applicant submits that the changes to S68 and S680 in the Figures were initially explicitly set forth in original claim 3. In particular, prior to the present amendment, claim 3 recited "a drive frequency at the commencement of rotation of said ultrasonic motor is stored as starting frequency data each time said ultrasonic motor starts". Accordingly, Applicant respectfully submits that the above-noted amendments related to S68 and S680 do not add new matter to the present application, but find explicit support in the originally filed application.

Furthermore, Applicant respectfully asserts that revising the S67 and S670 to read: the "current starting frequency data as a maximum frequency in the controllable frequency range", (i.e., "current starting frequency data" ->"maximum frequency"), merely clarifies the original disclosure. Of course, the original Figures and specification could not be taken to have another meaning, i.e., that the maximum value is assigned to the current starting frequency data (i.e., "maximum value"-> "current starting frequency data"), as the immediately preceding step of S65 is "Clear All Starting Frequency Data". Thus, there would not be a relevant maximum starting frequency data stored in the EEPROM to assign. However, Applicant believes that the above noted amendments will

reduce any potential confusion. Accordingly, Applicant respectfully submits that the above-noted amendments related to S67 and S670 do not add new matter to the present application.

Additionally, the additional amendment of the Figures at S67 and S670 explicitly corresponds to the language originally presented in claim 7, i.e., "maximum value in a controllable frequency range of said controller in the case where none of said starting frequency data is stored in said frequency data storing device". Accordingly, Applicant submits that the above-noted amendment to related to S67 and S670 also do not add new matter to the present application. Accordingly, as set forth above, Applicant submits that none of the present amendments to the specification and Figures adds new matter to the specification.

Applicant traverses the rejection of claims 1-12 and 15-17. In this regard, claim 1 has been amended to recite substantially all of the features previously recited in claim 3, and claim 3 has been cancelled. Accordingly, claim 1 now recites "a frequency data storing device in which a drive frequency at the commencement of rotation of said ultrasonic motor is stored as starting frequency data each time said ultrasonic motor starts; wherein said calculator calculates an average of all said starting frequency data stored in said frequency data storing device, and calculates the initial drive frequency data using the average".

The outstanding Official Action asserts, at pages 2 and 3, that KAWAMURA

discloses the above noted feature, i.e., "fig.8(e) in which a drive frequency at the commencement of rotation of the ultrasonic motor (1) is stored as starting frequency data each time the ultrasonic motor starts; wherein said calculation device (C1) calculates an average of all starting frequency data stored in said frequency data storing device, and calculates said initial drive frequency data using said average".

Applicant submits that the above-noted assertion of the outstanding Official Action is in error. According to the invention recited in claim 1, an ultrasonic motor is started by increasing a drive frequency from 1.) an initial drive frequency to 2.) a drive frequency at the commencement of rotation of the ultrasonic motor (which is stored in the frequency data storing device as a "starting frequency data"). A calculator calculates an initial drive frequency data based on the average of all starting frequency data stored in a frequency data storing device.

In this regard, KAWAMURA is arranged to memorize a speed measurement at an initially set frequency (see col. 7, lines 49-68). Additionally, speeds are measured at sequentially varied frequencies and compared with the speeds measured at the previous frequencies, to determine the frequency at which the rotating speed of the movable member 1 has the maximum value. Accordingly, a "maximum speed" is determined for all frequencies measured at steps b-f of Figure 8.

However, there is no teaching in KAWAMURA of obtaining 1.) an average value of 2.) previous starting frequencies. In this regard, the term "average" is not used

anywhere therein. Furthermore, KAWAMURA does not disclose or suggest calculating the initial drive frequency data using the average value obtained from the previous starting frequencies. Accordingly, KAWAMURA does not disclose or suggest "said calculator calculates an average of all said starting frequency data stored in said frequency data storing device, and calculates the initial drive frequency data using the average" as is recited in revised claim 1. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejection of claim 1.

Furthermore, each of claims 2 and 4-17 depend, directly or indirectly, from claim 1. Accordingly, Applicant respectfully submits that each of claims 2 and 4-17 is allowable, at least for depending, directly or indirectly, from an allowable claim 1, as well as for additional reasons related to their own recitations. Therefore, Applicant respectfully requests reconsideration and withdrawal of the outstanding rejections and objections, as well as an indication of the allowability of each of the claims now pending herein.

SUMMARY AND CONCLUSION

Applicant has made a sincere effort to place the present application in condition for allowance, and believes that he has now done so. Applicant has amended the claims to more clearly recite the features of the claimed invention. Applicant has discussed the features recited in Applicant's claims and has shown how these features are not taught, disclosed nor rendered obvious by the references applied by the Examiner.

Any amendments which have been made in this amendment, and which have not been specifically noted to overcome a rejection, should be considered to have been made for a purpose unrelated to patentability, and no estoppel should be deemed to attach thereto.

Should the Examiner have any questions, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully submitted,  
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